

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 1, line 2 with the following amended paragraph:

The present invention relates to a fragmentation processing device ~~and a fragmentation processing apparatus implementing thereof~~, and in particular, to a fragmentation processing device for, in the case of accommodating various lines to transfer IP packets, performing a fragmentation process at high speed only with hardware and a fragmentation processing apparatus implementing thereof.

Please replace the paragraph beginning at page 1, line 15 with the following amended paragraph:

~~As these~~-These MTU size and MRU size can have different values set for an input line and an output line respectively. Thereby there are cases where an apparatus on the IP network such as a router has to execute a fragmentation process. That is, a fragmentation process is required in the case where an IP packet of a size larger than the MTU size has to be sent. For instance, in the case of sending an IP packet of IP packet length A to the output line of which MTU size is B ($A > B$), the router cannot send this IP packet without dividing it into a size B or smaller. In this case, a fragmentation process is executed and an IP packet of the above size A is divided into IP packets of the MTU size or smaller and then sent. As for this fragmentation process, there is a process described in IETF RFC1812 Requirements for IP version 4 Routers, for instance.

Please replace the paragraph beginning at page 5, line 3 with the following amended paragraph:

~~The invention is preferred that~~ In one exemplary embodiment the IP packet assembling division is characterized by, after acquiring the N' pieces of fixed packet, creating IP packets in order.

Please replace the paragraph beginning at page 5, line 6 with the following amended paragraph:

~~The invention is preferred that,~~ In an exemplary embodiment the above described fixed packet is an ATM cell.

Please replace the paragraph beginning at page 5, line 6 with the following amended paragraph:

~~The invention is preferred that the~~ The header division of the fixed packet may include ~~includes~~ one of information on an input line on which the IP packets were inputted to the device and/or information on an input port in the device to which the fixed packets were inputted, and as for the IP packets assembled from the fixed packets, IP packet assembling means acquires information on an input line and/or information on an input port in the device to which the fixed packets were inputted from the fixed packet header on which the IP packets were written, and outputs the created IP packets to an output line corresponding to the input line to the device and/or the input port in the device to which the fixed packets were inputted.

Please replace the paragraph beginning at page 5, line 6 with the following amended paragraph:

~~The invention is preferred that in the~~ The fragmentation processing apparatus may have having a plurality of the fragmentation processing devices according to one of claims 1 to 5, each of the fragmentation processing device is associated with the input line on which the IP packets are inputted and creates the IP packets from the fixed packets on which the IP packets inputted from the associated input line are divided and written.

Please replace the paragraph bridging pages 5 and 6 with the following rewritten paragraph:

~~The invention is preferred that the~~ The fragmentation processing apparatus may further ~~has~~have a fixed packet separating means, which inputs the fixed packets to a predetermined fragmentation processing device for each of the input lines on which the IP packets are inputted to the device and/or the input ports in the apparatus to which the fixed packets are inputted.

Please replace the paragraph beginning at page 6, line 2 with the following amended paragraph:

~~The invention is preferred that the~~ The fragmentation processing apparatus may further ~~has~~have an IP packet integrating device, which outputs the IP packets assembled by the IP packet assembling means to the output line corresponding to the input line on which the IP packets are inputted to the apparatus and/or the input port in the apparatus to which the fixed packets are inputted.

Please replace the paragraph bridging pages 7 and 8 with the following rewritten paragraph:

Moreover, this fixed packet is created in the case where the fragmentation processing apparatus has received the IP packets. ~~A method is used one or more in known arts to create it.~~ In addition, it may be also that the fragmentation processing device 10 has the IP packets inputted, and when they are inputted, they are divided into fixed packets by an unillustrated fixed packet dividing division.

Please delete the present Abstract of the Disclosure and replace it with the following new Abstract of the Disclosure.

~~To provide a~~A fragmentation processing device for performing a fragmentation process only with hardware based on a set MTU size ~~and a fragmentation processing apparatus using the fragmentation processing device~~. On creating IP packets by combining fixed packets, there is acquired the largest number N' of the fixed packets that will be an IP packet of a size smaller than the MTU size. It assembles an IP packet ~~is assembled~~ at the time of acquiring the N' pieces of fixed packets.